

Orbigator Electronics Specification v1.2 Pin Map (Pico 2) I2C: SDA -> GP4 SCL -> GP5 Encoder: A -> GP16 B -> GP17 SW -> GP18 ULN2003 #1: IN1 -> GP8 IN2 -> GP9 IN3 -> GP10 IN4 -> GP11 ULN2003 #2: IN1 -> GP19 IN2 -> GP20 IN3 -> GP21 IN4 -> GP22 Pololu #1 (LAN Stepper): STEP -> GP14 DIR -> GP15 M0 -> GP2 M1 -> GP3 EN/SLEEP -> GP13 Pololu #2 (Spare Bipolar): STEP -> GP0 DIR -> GP1 M0 -> GP6 M1 -> GP7 EN/SLEEP -> GP13 (shared) Block Diagram
+-----+ | Pico 2 || | I2C -----| GP4 SDA GP5 SCL |----- OLED + RTC Encoder ---| GP16 A
GP17 B |----- Encoder | GP18 SW | ULN1 -----| GP8-11 |----- 28BYJ-48 AOV ULN2 -----| GP19-22
|----- Spare 28BYJ Pololu1 ---| GP14,15,2,3,13 |----- LAN Stepper Pololu2 ---| GP0,1,6,7,13 |-----
Spare Bipolar +-----+ Notes - EN/SLEEP shared for both Pololu drivers on GP13. -
SDA/SCL shared for OLED + DS3231 RTC. - Encoder uses GP16/17/18 as tested in hardware.